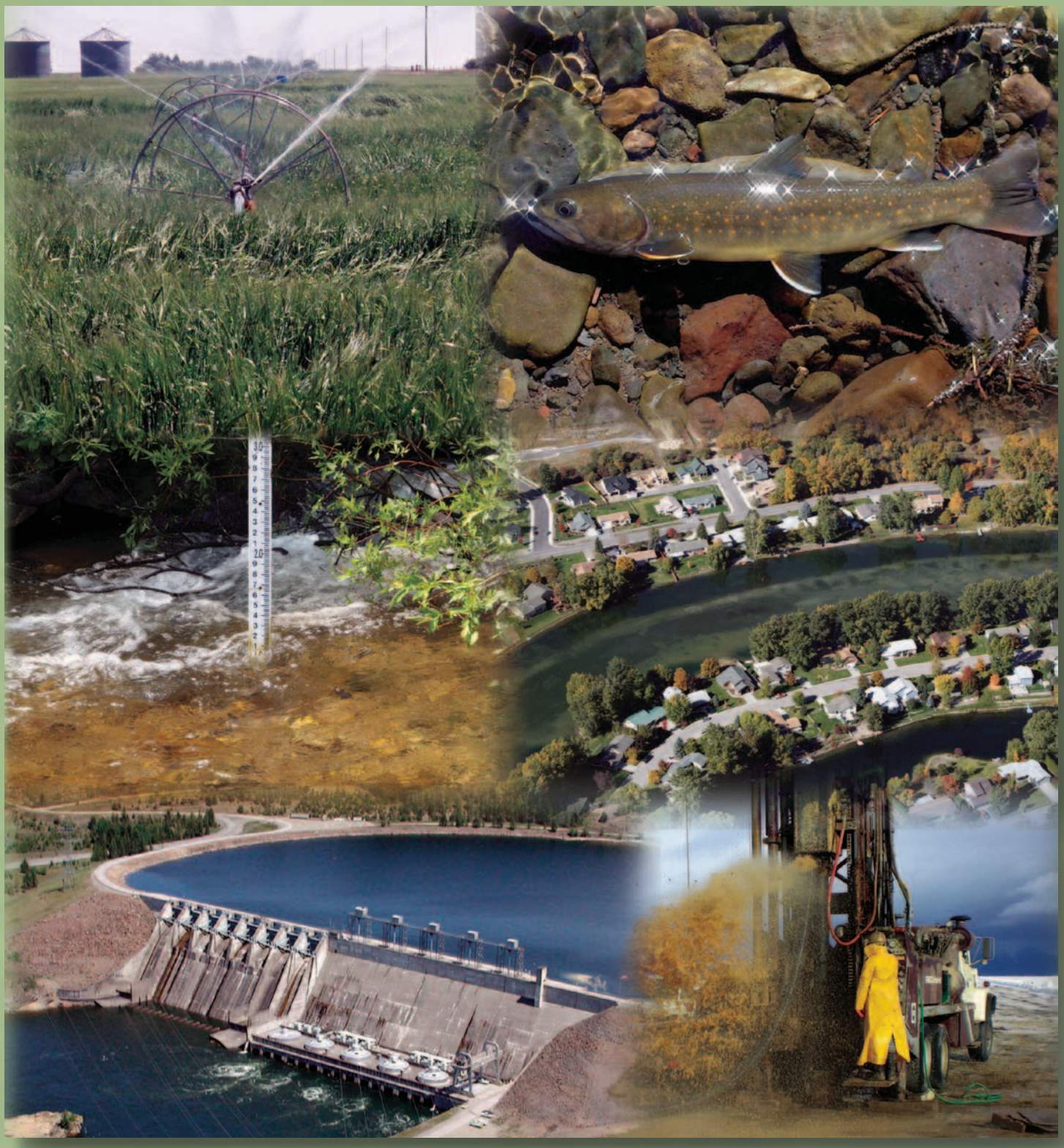
Managing Montana's Water:

Challenges Facing the Prior Appropriation Doctrine in the 21st Century

by the Clark Fork River Basin Task Force • July 2008



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Managing Montana's Water: Challenges Facing the Prior Appropriation Doctrine in the 21st Century

This paper is prepared by the Clark Fork River Basin Task Force (Task Force)[1] to review the status of Montana's water allocation and management system and then to examine the challenges facing it. Montana water law is based on the prior appropriation doctrine which is commonly summarized by "first-in-time, first-in-right."[2] First-in-time, first-in-right means that water use is based on water rights with a priority determined by when water was first put to a beneficial use. Increased competition for water resources and increased management complexity are creating challenges for implementation of this doctrine. The challenges result from reliance on individual water users for administration and enforcement that threatens the viability of water rights, ground water development that impacts surface water, choices related to domestic water sources, and federal statutes and regulations that constrain the operation of federal water projects and river flow.

History of Montana Water Allocation and Management

Pre-1973

Prior to the passage in 1973 of the Montana Water Use Act, the right to use water in Montana was obtained simply by putting it to a beneficial use.[3] No central compilation of water rights existed. Resolution of water right disputes and adjudication of water rights occurred in local courts in actions brought by individuals.[4]

Post 1973

In 1972, Montanans adopted a revised Constitution. Article IX, Section 3 of the new Constitution includes several provisions regarding water and water rights. It recognizes and confirms existing water rights. It asserts that "All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people..." It subjects state waters "...to appropriation for beneficial uses as

For more information about the Clark Fork Task Force see

http://dnrc.mt.gov/wrd/water_mgmt/clarkforkbasin_taskforce/

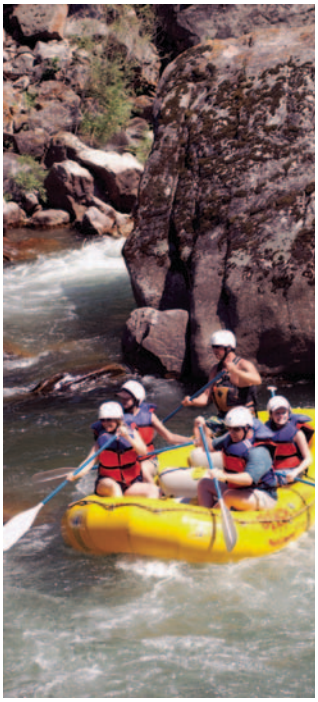
Clark Fork River

[1]The Clark Fork River Basin Task Force was created in 2001 pursuant to a state statute, 85-2-350 MCA. This statute requires that members of the Task Force be representative of the water interests and sub-basins in the Clark Fork River basin. It charged the Task Force with developing a water management plan for the basin that identified options to protect the security of water rights and provided for the orderly development and conservation of water in the future. The Task Force presented the *Clark Fork Basin Watershed Management Plan* to Montana's governor and legislature in September 2004. The *Plan* was subsequently adopted by the Montana Department of Natural Resources and Conservation into the State Water Plan. For more information about the Task Force see http://dnrc.mt.gov/wrd/water_mgmt/clarkforkbasin_taskforce/default.asp.

[2]In 1894, the Montana Territorial Legislature established the riparian doctrine as the means of allocating water. In this system, title to water is granted to landowners whose property is adjacent to rivers and streams. It was not until 1921 that the Montana Supreme Court rejected the riparian system in favor of prior appropriation. See Shovers, "Diversions, Ditches, and District Courts," *Montana - The Magazine of Western History*, Spring 2005.

[3]Stone, *Selected Aspects of Montana Water Law*, 1978, page 28.

[4]In 1903, the Montana Legislature established the Montana State Engineer's Office and charged the State Engineer with surveying the state's water systems to determine annual flows and with overseeing implementation of an 1894 federal statute that allowed private companies to develop irrigation systems. In 1934, the Legislature created the Montana State Water Conservation Board (SWCB) and authorized it to investigate and fund water storage and irrigation projects. In 1965, the Legislature abolished the Montana State Engineer's Office. Two years later, it replaced the Montana State Water Conservation Board with the



provided by law," and requires the legislature both to "...provide for the administration, control, and regulation of water rights and ... establish a system of centralized records, in addition to the present system of local records." In response to latter directive, the Montana legislature passed the Montana Water Use Act in 1973. This Act established a centralized record system for water rights and required that all water rights existing prior to July 1, 1973 must be finalized through a state-wide water rights adjudication in state courts. It also provided that a new water right or a change to an existing right requires a permit from the Montana Department of Natural Resources and Conservation (DNRC).[5]

Adjudication

To "expedite and facilitate" the state-wide water right adjudication, the legislature passed SB 76 in 1979. SB 76 mandated a comprehensive adjudication of all pre-1973 water rights in a newly created Montana Water Court. It also created the Montana Reserved Water Rights Compact Commission and charged it with negotiating federal and tribal reserved water rights.[6] Twenty-five years later, the Water Court had issued 42 temporary preliminary decrees, 14 preliminary decrees, and 6 decrees that are sometimes labeled as final, but will have to be re-opened.[7] A major reason for the slow pace of the adjudication was insufficient staff and funding for the DNRC to carry out its claims examination responsibilities.[8] In 2005, the legislature passed a water rights fee to increase funding to DNRC and the Montana Water Court in an attempt to complete the adjudication by 2020. DNRC hired 30 additional staff and was on pace to complete its examination work by 2015.

Surface Water Appropriations

Historically, under the prior appropriation doctrine, Montanans obtained water for new uses by acquiring new surface water rights. However, by 2007 the era of new surface water rights supporting new uses was essentially over. Many of Montana's major river basins were

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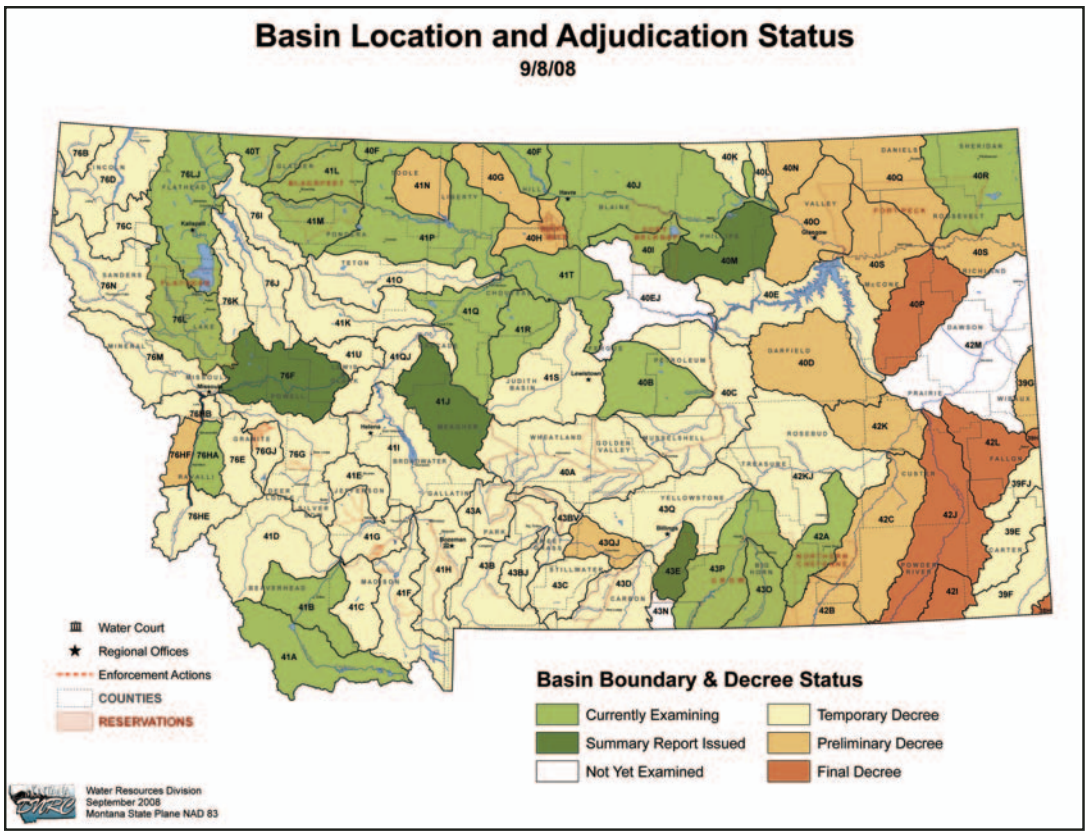
Montana Water Resources Board (MWRB) and directed it to prepare a state water plan. See Shovers, "Diversions, Ditches, and District Courts," *Montana - The Magazine of Western History*, Spring 2005. According to Shovers, the same 1967 statute required "...that all water-right holders must make a declaration of their appropriation to their county clerk, who, in turn, would forward them to the board in Helena to be compiled into a comprehensive inventory of water resources." The Board did not compile a comprehensive inventory. Neither the State Engineer, SWCB, or MWRB had the authority to resolve water right disputes or adjudicate water rights. This authority remained in local courts.

[5] *Water Rights in Montana*, published by the Montana Department of Natural Resources and Conservation, the Legislative Environmental Quality Council, and the Montana University System Water Center, February 2006, page 3.

[6] Federal reserved water rights were created by the United States Supreme Court in its ruling in Winters v. United States [206 U.S. § 564 (1908)]. The Supreme Court held that when Congress or the President sets aside land out of the public domain for a specific federal purpose, such as an Indian reservation, National Park, or National Forest, a quantity of water is impliedly reserved which is necessary to fulfill that primary federal purpose. A federal reserved water right has a priority date as of the date the land was withdrawn and the reservation was created; it cannot be lost through nonuse.

[7] See Mont. Code Ann. § 85-2-237 (reopening and review of decrees).

[8] "White Paper on the Montana Water Rights Adjudication" issued by the Upper Clark Fork River Basin Steering Committee on March 2, 2004, page 8.



closed to new surface water rights, with specific exceptions for some uses. The closed basins included the upper Missouri, Jefferson, Madison, Teton, upper Clark Fork, Bitterroot, and the Musselshell. The mainstem of the Milk River was closed. The unquantified Salish and Kootenai Tribal water rights and a 2006 DNRC hearing's officer ruling may have effectively closed the Clark Fork River basin to new surface water rights.[9] Several individual creeks were also closed by petition and administrative orders during a portion of each year. Water right compacts with federal agencies and Indian tribes had closed certain water

[9]In denying water the right permit Application No. 76N-30010429 submitted by the Thompson River Lumber Company, DNRC found additional water from the Clark Fork River not to be "reasonably available" and that the proposed diversion would adversely affect a prior appropriation at Noxon Dam. DNRC determined that the applicant proved that water is "...only available when Clark Fork River flows exceed 50,000 cfs which is only on average 16-24 days per year." Outside of this period, the applicant would be subject to a call by Avista. DNRC also concluded that the applicant did not prove that Avista would not be adversely affected by diminished flows in the amount of the applicant's proposed diversion on the days where flows do not exceed 50,000 cfs. DNRC's decision was not appealed to district court. In a June 9, 2008 memo, John Tubbs, Administrator of the DNRC Water Resources Division, clarified the Thompson Falls Lumber Company decision by excluding the Flathead River and its tributaries upstream of the Flathead Indian Reservation Boundary from the precedent it created. He stated that these basins remain open to new surface water rights.

sources to new appropriations.[10] Even in areas not closed, a new surface water right would be the most junior for a given water source. The new user would be entitled to "wet" water only after all other senior rights are satisfied.

Water Reservations

The 1973 Water Use Act allowed state or federal agencies or political subdivisions of the state to apply to the Board of Natural Resources and Conservation to reserve surface and ground water for present and future beneficial uses, including municipal, irrigation, instream flows, and water quality.[11] Large instream flow reservations were granted for the upper and lower Missouri River basins and the Yellowstone River basin. No reservations have been granted in Montana basins west of the Continental Divide to reserve water for future use.[12]

Mechanisms to Provide for New Water Uses

The ending of the era of new surface water rights means that new water uses will depend on one or more of three mechanisms: changes to existing water rights, contracting for stored water, or using ground water. Ground water will be discussed in the next section of this paper. The efficacy of changes to or purchases of existing rights depends on two things, completion of the water right adjudication so that one can be confident in the status of a pre-1973 water right and the user friendliness of the administrative system for changing water rights. While some water may be available from privately or state owned reservoirs and other water bodies, the most likely source of storage for new water uses is the large federally owned reservoirs: Fort Peck, Tiber, Canyon Ferry, Hungry Horse, Koocanusa, and Yellowtail. Contracts from these reservoirs will also be discussed below. Another possibility is aquifer storage and recovery - injection of surplus surface water into aquifers for latter drafting by wells.

Ground Water Appropriations

Montana first began to regulate ground water development in 1961 when the legislature passed a ground water code establishing a system for appropriation of ground water.[13] The 1973 Water Use Act required DNRC permits for ground water developments of 100 gallons per minute or more. In 1991, the legislature recognized the significance of ground

[10]For a complete listing of closures created by statute, administrative action, and compact, see *Water Rights in Montana*, February 2006, pages 36-40.

[11]Draft Environmental Impact Statement, Upper Clark Fork Basin Water Reservation Applications, Montana DNRC, December 1988, page 1-2, 85-2-316(1) MCA.

[12]In 1987, Granite Conservation District and the Montana Department of Fish, Wildlife and Parks filed competing applications for reservations of surface water in the upper Clark Fork River basin. Processing these applications was suspended by basin closure established by 85-2-336. This same statute sets the priority date for these applications to be May 1, 1991. Pursuant to 85-20-1401, the United States Forest has applied for a reservation of the waters of Chicken Creek, a tributary to the West Fork of the Bitterroot River. Forest Service reservations must be for instream flow only.

[13]*"Managing Montana's Water"* at http://water.montana.edu/pdfs/headwaters/headwaters6.pdf, page 4. Prior to the effective date of the ground water code, January 1, 1962, ground water could be appropriated only if it flowed in a "permanent, defined, and known channel." See Doney, *Montana Law Handbook*, published by the State Bar of Montana, October 1981, page 13-14 and 18-19.

water as a supply for Montana water users and passed the Montana Ground Water Assessment Act establishing the Montana Ground Water Assessment Program to characterize and monitor the state's ground water and conduct long-term, statewide monitoring of ground water quality and water levels.[14] Also in 1991, the legislature changed the definition of ground water developments exempt from DNRC water right permitting to 35 gallons per minute or less and 10 acre-feet per year or less.[15]

Federal Storage Reservoirs

Beginning in the 1930s and continuing through the 1970s, the federal government constructed several large dams and reservoirs in Montana. In order of construction, these included the Fort Peck, Hungry Horse, Canyon Ferry, Tiber, Yellowtail, and Libby Dams. The agencies charged with operating these dams, the United States Bureau of Reclamation (BOR) and the United States Army Corp of Engineers (COE) filed water rights with the state claiming the right to store water to market it to water users for various purposes.[16] In response to concerns about the marketing of Montana water for industrial purposes, especially for coal slurry pipelines, the 1983 Montana legislature created the Select Committee on Water Marketing (Committee). In response to recommendations from the Committee,[17] the 1985 legislature created a state water leasing program for the purposes of limiting the total amount of water that the state could lease and providing revenue to the state. The limit was 50,000 acre-feet. The Committee recommended and the legislature authorized the state to obtain water for any beneficial use from existing federal reservoirs, Fort Peck, Hungry Horse, Canyon Ferry, Tiber, and Yellowtail, provided that the state had an agreement between the state and federal government to share the revenue from marketing the water.[18] The state negotiated a contract with the COE for Fort Peck water, but did not market any of it. This contract expired in 1980s, and was not renewed.

In 2007, the Task Force successfully sought legislation to raise the cap from 50,000 to 1,000,000 acre-feet on the amount of water that the state can lease for beneficial uses when the source of the water is a federal reservoir and when the water leased is not used out of the basin in which the reservoir is located. The legislation also eliminated the requirement that water marketing revenue be shared between the state and federal government. The Task Force sought this legislation to use Hungry Horse water to provide for future water uses in the Clark Fork River basin and to protect uses of water in the basin that are junior to lower basin hydroelectric water rights.[19]

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[14]http://www.mbmg.mtech.edu/grw/grwassessmemt.asp

[15]Montana Session Laws Sec. 4, Ch. 805, L. 1991.

[16]COE constructed and operates Fort Peck and Libby Dams, and BOR constructed and operates Hungry Horse, Canyon Ferry, Tiber, and Yellowtail Dams.

[17]*Summary of the Report of the Select Committee on Water Marketing to the 49th Legislature*, January 1985.

[18]85-2-141(3) MCA.

[19]*Clark Fork Basin Watershed Management Plan*, Chapter 6, Hydropower Water Rights and Basin Water Use, pages 73-78, September 2004.

Challenges Facing the Prior Appropriation System

Administrative and Enforcement Challenges

Article IX, Section 3(3) states, "All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law." However, the authority of DNRC, the agency assigned with the task of providing for the administration, control, and regulation of water rights, is limited. In his article entitled "Diversion, Ditches, and District Courts" published in *Montana the Magazine of Western History*, Brian Shovers wrote that Montana irrigators historically "... preferred the uncertainty and cost of litigation to established limits imposed by a centralized system." Rather than DNRC, the responsibility for adjudicating and enforcing water rights and resolving water disputes has been "...entrusted to ditch riders, water masters, and district court judges."[20]

In the adjudication process, DNRC's role is limited to examining water rights claims, and placing remarks identifying problems on them. DNRC does not act as an institutional objector, an entity assigned with examining all claims and filing objections to errant claims. Individual water right holders in a given decree bear this burden. In a policy paper discussing the implications of completing the state-wide water rights adjudication, the Upper Clark Fork River Basin Steering Committee wrote, "In larger basins with thousands and in some instances tens of thousands of water rights claims, individual water users cannot be expected to have the knowledge, willingness, and financial resources necessary to scrutinize every claim and to pursue more than a few objections."[21] Ameliorating this concern somewhat is the fact that claims with DNRC issue remarks to which no objections are filed by individual water right holders must be heard before the Water Court. DNRC staff must appear and explain their remarks. The Montana Water Court must address DNRC issue remarks prior to the issuance of final decrees.[22]

DNRC is not the state's water cop. It plays a limited role in enforcing pre-1973 water rights. Since the passage of the 1973 Water Use Act, it can seek to enforce water right permits by filing actions in district court. However, because of staffing and funding limitations, DNRC has almost never used its authority to go to court.

The enforcement burden falls almost entirely on individual water right holders. Individuals can make calls on junior users and file lawsuits in district court to enforce their water rights. Water users within an enforceable water rights decree can petition district court to appoint a water commissioner to act as the court's agent and allocate the available supply of water according to the decree water right priority dates. The cost of the water commissioner is borne only by those water users receiving water pursuant to the commissioner's action rather than by all those subject

[20]Shovers, "Diversions, Ditches, and District Courts," *Montana - The Magazine of Western History*, Spring 2005, page 14.

[21]"White Paper on the Montana Water Rights Adjudication" issued by the Upper Clark Fork River Basin Steering Committee on March 2, 2004, pages 5-6.

[22]*Water Rights in Montana*, page 12-13.

to the decree. Water commissioners generally work only during the irrigation season and are not provided benefits such as health insurance, sick leave, or worker's compensation insurance. While the existing water commissioner mechanism has worked in some areas, in others, finding someone willing to serve as a commissioner has already been a challenge. As local water right decrees are integrated in the adjudication process, enforcing decrees will become more challenging and may involve a hierarchy of commissioners.

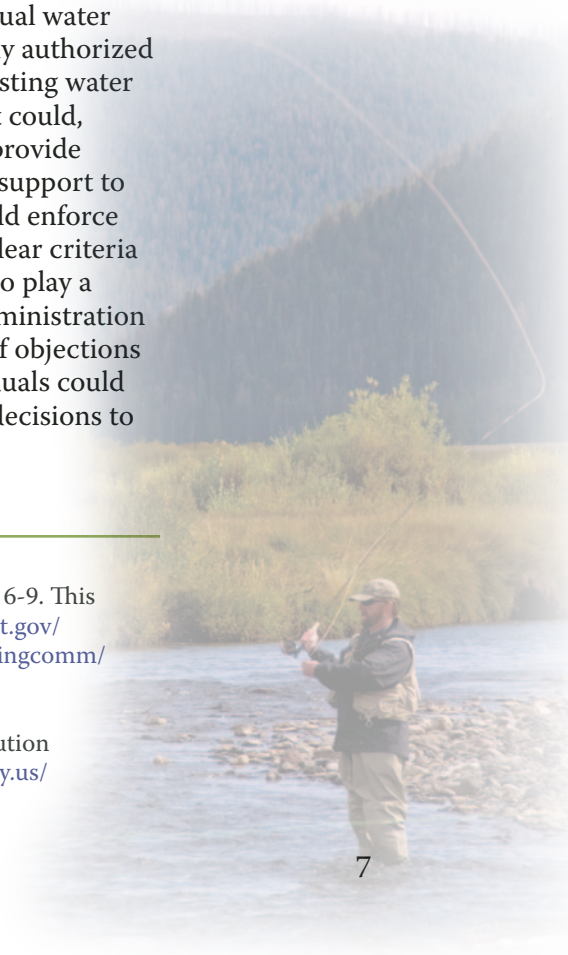
DNRC's administrative permit process for obtaining and changing water rights also places a substantial time and cost burden on water users. As is the case with the adjudication process, individual water rights holders have the right to object to permit applications for new or changed uses. Because these objections are heard in a contested case procedure, participants generally choose to be represented by legal counsel. DNRC has estimated that the average time for processing a water right permit application is 245 days. If an objection is filed to it, processing takes more time.[23]

Because of Montana's reliance on the judicial system and contested case administrative processes, the burden on individual water users to adjudicate, enforce, protect, and make changes to existing rights can literally take years and tens of thousands of dollars. This burden is increasingly problematic for traditional water users such as farmers and ranchers.

Water administration and management has generally followed a more centralized approach in the other western states than has been the case in Montana.[24] An example of the centralized model is Wyoming. Article 8, Section 2 of Wyoming's 1889 constitution provides:

> There shall be constituted a board of control, to be composed of the state engineer and superintendents of the water divisions; which shall, under such regulations as may be prescribed by law, have the supervision of the waters of the state and of their appropriation, distribution and diversion, and of the various officers connected therewith. Its decisions to be subject to review by the courts of the state.[25]

Granting DNRC more authority to administer and enforce water rights could reduce the burden on individual water users. DNRC could be directly authorized to investigate and enforce existing water rights and resolve disputes. It could, for example, hire, train, and provide technical and administrative support to water commissions who would enforce water rights decrees. Given clear criteria for doing so, DNRC could also play a more authoritative role in administration processes reducing the role of objections to expedite decisions. Individuals could be allowed to appeal DNRC decisions to district court.



[23]Permit processing time was reported by John Tubbs to the Water Policy Interim Committee meeting on April 29, 2008.

[24]Shovers, pages 6-7. Also, see "How Will Completion of the Adjudication Affect Water Management in Montana?" prepared by the Upper Clark Fork River Basin Steering Committee, February 2006, pages 6-9. This paper is available at http://dnrc.mt.gov/wrd/water_mgmt/clarkfork_steeringcomm/completionof_adjud_rpt.pdf.

[25]A copy of the Wyoming Constitution is available at http://soswy.state.wy.us/informat/05Const.pdf.

These changes to create a more centralized water right process would require legislation to increase DNRC's authority, staffing and budget. They would also require a greater willingness on the part of individual water right holders to trust and accept a more assertive and intrusive DNRC. Maintaining the existing system based on local control with its burden on individual responsibility may come at the cost of an effective loss of water rights by those for whom the time and expense of hiring attorneys and pursuing court action is increasing unaffordable.

The State of Idaho provides somewhat of a middle ground between state and local control. Water users within local water districts elect water masters, who are charged with distributing water in the order of priority to those water users entitled to its use. The water district sets the level of compensation for water masters, who, once hired, become state employees.[26]

Another portion of the State Constitution may complicate water right enforcement. Article II, Section 3 states that Montanans' inalienable rights include, "...the right to a clean and healthful environment and the rights of pursuing life's basic necessities..." Although neither statute nor court rulings have done so, the clean and healthful environment provision might be construed to prevent DNRC from allocating or managing water in a manner detrimental to "a clean and healthful environment," irrespective of the prior appropriation doctrine. As will be discussed below, Article II, Section 3 may also affect appropriations of water for people's "basic necessities."

Ground Water and Surface Water Interactions

Another challenge to the first-in-time, first-in-use, prior appropriation system is the increased acknowledgment of ground and surface water interactions.

In a recent decision, Montana Trout Unlimited (TU) vs. DNRC, the Montana Supreme Court clarified the regulation of those interactions. The Court noted that Montana basin closure laws recognized the close relationship between surface and ground water, and defined ground water to mean "...water that is beneath the land surface or beneath the bed of a stream, lake, reservoir, or other body of surface water and that is not immediately or directly connected to surface water."[27] Because these statutes did not define "immediately or directly connected," DNRC interpreted this phrase to mean "...that a ground water development could not pull surface water directly from a stream or other source of surface water."[28] The Montana Supreme Court invalidated this interpretation in the Montana Trout Unlimited (TU) vs. DNRC case because it "...recognizes only immediate connections to surface flow caused by induced infiltration and ignores the less immediate, but no less direct, impact of the prestream capture of tributary

[26] *Webmaster Handbook*, Idaho Department of Water Resources, page 8. This publication is available at http://www.idwr.idaho.gov/water/districts/Water%20District%20Publications/watermaster_handbook.pdf.

[27] See 85-2-342(3) MCA, 2005. This language was included in the basin closure statutes for the Upper Missouri, Teton, Jefferson, Madison, Teton, and Upper Clark Fork River basin closures.

[28] Montana Supreme Court decision in Case Number 05-069, Trout Unlimited vs. DNRC, page 6, April 11, 2006.

ground water."[29] This decision halted DNRC processing of water right permit applications in statutorily closed basins incorporating the "immediate and direct" definition of ground water.

In response to this Supreme Court decision, the 2007 legislature passed House Bill 831. HB 831 was entitled:

> "An act revising water laws in closed basins; defining terms in water use laws; amending requirements for an application to appropriate ground water in a closed basin; providing that certain applications to appropriate surface water are exempt from closed basin requirements; providing requirements for hydrogeologic assessments, mitigation plans, and aquifer recharge plans; providing minimum water quality standards for certain discharges of effluent; requiring that previously approved plans that were not located in the Clark Fork basin must meet certain criteria; requiring that data be submitted to the Bureau of Mines and Geology; providing for rulemaking; providing for a case study and requirements and a fee for participation in the case study; recognizing and confirming existing appropriation rights in certain instances; providing an appropriation; amending sections 85-2-102, 85-2-302, 85-2-311, 85-2-329, 85-2-330, 85-2-335, 85-2-336, 85-2-337, 85-2-340, 85-2-341, 85-2-342, 85-2-343, 85-2-344, 85-2-402, and 85-2-506, MCA; repealing section 85-2-337, MCA; directing the amendment of ARM 36.12.101 and 36.12.120; and providing an immediate effective date and applicability dates an applicability date."

This title befitted the complexity of the legislation's content. HB 831 required an applicant for a new well in a closed basin to provide a hydrologic assessment conducted by a hydrologist, qualified scientist, or qualified licensed professional engineer demonstrating whether the new appropriation would result in a net depletion of surface water. If a net depletion would result, the applicant must also assess whether it would result in an adverse effect on an existing water right. If an adverse effect is predicted, the applicant must file a plan for mitigating that impact. The bill also appropriated $500,000 to the Montana Bureau of Mines and Geology to conduct a case study to determine minimum standards and criteria for the hydrologic assessments.

Although the TU vs. DNRC decision and HB 831 apply strictly only to basins closed to most new surface water rights, the requirement to address prestream capture of tributary ground water, i.e., the interception of ground water that would otherwise flow to a surface water body, and for mitigation plans may be applied to all ground water permitting. DNRC cannot issue a permit for a new water right or a change to an existing right without finding that the new or changed use would not adversely affect any existing right. Applying the adverse affects test to new ground water developments requires assessing prestream capture. Ground water applicants whose development would result in both prestream capture and an adverse effect will likely have the opportunity to offer plans to mitigate it.

DNRC's proposed rules for determining net depletions pursuant to HB 831 require an applicant to determine the "Propagation of draw down from a well

[29] *Ibid*, page 19.

or other ground water diversion and rate, timing, and location of any resulting surface water depletion effects."[30] Timing is a key issue for managing and enforcing surface and ground water rights in a prior appropriation system. The impacts of ground water development on surface flows may take place over months or years rather than immediately.[31] Although Montana's laws may not specifically provide for conjunctive management or enforcement of surface and ground water, neither do they preclude it. As ground water development continues, surface water holders may decide that protecting their rights requires enforcement of their priority dates against wells. Water rights calls on wells have occurred in Idaho to protect surface rights. Montana law allows junior users to defend against calls by seniors if the call would be futile, i.e., that the call would not result in water for use by the senior right holder.[32] How futile calls would be applied to ground water wells with a delayed impact on surface water is not known. DNRC has written, "Ground-water use is difficult to curtail to avoid impacts to surface water users during water shortages under a prior appropriations system."[33]

The complexity of ground water development and use and its interaction with surface water does not bode well for the strict application of the prior appropriation doctrine.

Adverse Affects Test

The nature of the test to determine whether an adverse affect has occurred has become controversial. Before DNRC issues a permit to appropriate water or to change an existing water right, it must find that no existing right would be adversely affected. In his March 30, 2006 Proposal for Decision in the Matter of Application for Beneficial Water Use Permit No. 76N 30010429 by Thompson River Lumber Company, a DNRC Hearing Examiner, wrote, "Adverse affect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of water will be controlled so the water rights of a prior appropriator will be satisfied." DNRC evaluates the adverse affect test on a calculated rather than a measured basis, i.e., an adverse effect need not be measurable. For example, measuring the impact of a small upstream diversion on a hydropower generator's use of water to produce electricity may not be possible. Measuring devices are generally accurate only to within 5-10% of the flow. However, as long as the hydropower water right holder can show a calculable impact of the diversion, an adverse effect would exist. The impact of ground water withdrawals on surface water is also generally calculated rather than measured. An attempt was made unsuccessfully in the 2007 legislature to overturn DNRC's calculated rather than

[30]DNRC, "Notice of Public Hearing On Proposed Amendment in the Matter of the Proposed Amendment of Arm 36.12.101, Definitions and Arm 36.12.120, Basin Closure Area Exceptions and Compliance," August 13, 2007, available at http://dnrc.mt.gov/About_Us/notices/august/36-22-12.pdf.

[31]Kendy, E. and J.D. Bredehoeft, 2006, "Transient effects of ground water pumping and surface-water irrigation returns on stream flow," *Water Resources Research*, V. 42.

[32]*Clark Fork Basin Watershed Management Plan*, Chapter 4, Legal Framework for Water Management, page 66, September 2004.

[33]DNRC unpublished paper provided to the Water Policy Interim Committee for its January 15-16, 2008 meeting.

measured interpretation by defining adverse effect quantitatively such as a percentage reduction in water supply to a senior user.

Domestic Water Supply

As previously noted, Article II, Section 3 of the Montana Constitution recognizes the right to pursue "life's basic necessities" as one of Montanans' inalienable rights. Some may argue that because water is a basic necessity, Montana water law should give domestic use priority. All other states subject to the prior appropriation doctrine except Washington provide such a priority to some extent in either their constitution or by statute.[34] In Montana, with two exceptions, priority of water use depends only on the date on which water was first put to a beneficial use or on which a permit was acquired. One exception applies within a controlled ground water area. In such an a area, "...preferences can be imposed on existing rights to withdraw ground water, with domestic and livestock uses having first preference."[35] The other exception is a priority of water reservations in the Yellowstone River basin over certain water permits.[36] Cities and towns have the right to condemn water rights to provide a water supply for municipal and domestic water systems.[37] Individuals do not. Condemnation requires "just compensation" to those whose rights are taken.[38]

[34]Arizona and California apply prior appropriation to surface water, but not ground water. Colorado exempts small wells outside of designated ground water basins from water rights administration under the priority system. In designated ground water basins, in-house uses are exempt, while outdoor lawn watering, etc., is not. See Division of Water Resources, Colorado Department of Natural Resources, Guide to Colorado Well Permits, Water Rights, and Water Administration, January, 2008, pg. 2. Article XV, Sec. 3, Constitution of the State of Idaho states "...priority of appropriation shall give the better right as between those using water; but when the waters of any natural stream are not sufficient for the service of all those desiring the use of the same, those using the water for domestic purposes shall (subject to the limitations as may be prescribed by law) have the preference over those claiming for any other purpose..." This provision applies to all water including ground water. In Nevada, the only ground water rights that are subject to curtailment are those that are in "designated ground water basins," and even in those basins, domestic uses are exempt. See Nevada Revised Statutes Sec. 534.180. With the exception of two specially designated domestic well management areas, domestic wells in New Mexico are generally not subject to curtailment. See 72-12-1.1 New Mexico Statutes Annotated and 19.27.5.14 New Mexico Administrative Code (adopted in 2006). Section 536.310(12) of Oregon's statutes provides "When proposed uses of water are in mutually exclusive conflict or when available supplies of water are insufficient for all who desire them, preference shall be given to human consumption purposes over all other purposes and for livestock consumption over any other use..." Section 83-3-21 of the Utah Code states "...[I]n times of scarcity, while priority of appropriation shall give the better right as between those using water for the same purpose, the use for domestic purposes, without unnecessary waste, shall have preference over use for all other purposes..." Wyoming Statutes provide in Section 41-3-102(b) that "Preferred water uses shall have preference rights in the following order: (i) water for drinking purposes for both man and beast; (ii) water for municipal purposes..."

[35]Doney, *Ibid*, page 3485-2-507(4)(c) MCA.

[36]85-2-603(2) provides, "A reservation established before an application for permit is granted is a preferred use over the right to appropriate water pursuant to the permit, and the permit, if granted, must be issued subject to that preferred use."

[37]Doney, *Ibid*, page 33.

[38]70-31-301 MCA.

Some western states have incorporated the "growing communities doctrine" into their statutes. Under this doctrine, a city or town maintains the right to more water than it is actually using so that it can meet the expanding domestic water needs of growing populations. This doctrine appears to contradict the prior appropriation doctrine because municipal water rights would not be limited to historic beneficial use and would not be subject to abandonment for nonuse. DNRC has written that neither the Montana Water Use Act nor Montana case law provides for this doctrine.[39]

One aspect of current Montana water law has had a large impact on the way people develop water for domestic use. As previously mentioned, since passage of the 1973 Water Use Act, certain ground water developments have been exempt from DNRC permit requirements. Current law provides that:

> Outside the boundaries of a controlled ground water area, a permit is not required before appropriating ground water by means of a well or developed spring with a maximum appropriation of 35 gallons a minute (gpm) or less, not to exceed 10 acre-feet a year (ac-ft/yr), except that a combined appropriation from the same source from two or more wells or developed springs exceeding this limitation requires a permit.[40]

To obtain a water right for a beneficial use of ground water subject to this exemption, the developer need only file a notice of completion with DNRC within 60 days of completing the well or developed spring.[41]

This exemption, together with DNRC's interpretation of "combined appropriation," has influenced how subdivisions have been developed in Montana, particularly in the fastest growing areas in the western portion the state. DNRC rules provide that a combined appropriation means, "...an appropriation of water from the same source aquifer by two or more ground water developments, that are *physically manifold into the same system.*"[42] (Emphasis added.) This definition and the exemption allows a subdivision developer to avoid the time and expense of obtaining DNRC permits before water can be developed and used.[43] Instead of providing the subdivision with a community water supply and system, the developer can sell lots and leave each purchaser to dig an individual well. Over the last five years, 80% of the lots approved by DEQ had exempt wells rather than community water systems.[44]

Between July 1, 1973 and September 1, 2007, DNRC issued 104,142 certificates of water rights for exempt ground water developments. Seventy-five percent of all of the 104,142 certificates listed domestic

[39]See the January 31, 2008 letter from DNRC Regional Manager Bill Schultz to Stephen R. Brown, Garlington, Lohn & Robinson.

[40]85-2-306(3)(a) MCA.

[41]85-2-306(3)(b) MCA

[42]36.12.101(14) ARM.

[43]*Water Rights in Montana*, page 18 and 17.38.202(5) ARM.

[44]Private communication from Curt Martin, December 19, 2007. This information was provided by the DEQ Subdivision Bureau to the Water Policy Interim Committee on October 24, 2007.

use as a purpose of use.[45] DNRC estimates that by the end of 2007, it will have issued about 40,000 certificates for exempt wells using the 35 gpm/10 ac-ft/yr definition that came into effect in 1991. Over half of the 40,000 will have been issued in Gallatin, Lewis and Clark, Missoula, Ravalli, and Flathead Counties, and over 80% will have been issued in just 14 counties, only 3 of which are outside of western Montana.[46] DNRC estimates that if the current ground water permit exemption remains in effect, somewhere between 32,000 and 78,000 additional certificates for exempt wells will be issued by January 1, 2020.

While an individual 35 gpm/10 ac-ft/yr ground water development may have a negligible impact on an aquifer and surface water connected to it, the impact of multiple exempt wells may be significant. As written above, before DNRC issues a permit to appropriate water or to change an existing water right, it must determine whether any existing right would be adversely affected. Existing right holders have the opportunity to object to a permit application to protect their rights. However, because they do not require DNRC permits, exempt ground water users avoid these tests. DNRC has noted that new exempt wells are not subject to the provisions of HB 831 which were designed to ensure that ground water pumping does not adversely affect senior surface water right users.[47] Senior water rights holders can make call on junior exempt wells. However, the delayed impact of ground water withdrawals on surface water may make calls problematic and expensive to prove in court.

Another important source for local domestic water supplies is irrigation which charges local aquifers. In Montana, two changes are occurring that may threaten this source. First, irrigated lands are being sold and converted to other land uses. Second, flood irrigation has been converted to sprinklers to better match water application to crop needs. Both changes reduce the flow of water to the aquifer and may, therefore, reduce the amount of water available for domestic wells depending on local conditions. The eastside benches in the Bitterroot Valley below the Bitterroot Irrigation District ditches, the Daly ditches, and the Supply ditch and areas west of Billings are examples of areas in which reductions in irrigated agriculture are adversely affecting domestic wells. Current law does not provide tools for domestic ground water users to protect against such changes.

Domestic water use inside a house is for the most part non-consumptive. Use outside the home is more consumptive. Depending on the method of waste water treatment, individual septic system or sewage treatment plant, in-house domestic use may recharge the local aquifer or be discharged to surface water.

[45]"Wells Exempt from the Permitting Process", presentation by Curt Martin to the Water Policy Interim Committee on the September 13, 2007.

[46]The 14 counties are Ravalli, Flathead, Gallatin, Lewis and Clark, Missoula, Yellowstone, Lincoln, Madison, Park, Lake, Jefferson, Carbon, Cascade, and Sanders.

[47]Unpublished DNRC paper entitled "Effects of Exempt Wells on Existing Water Rights" provided to the Water Policy Interim Committee at is January 15-16, 2008 meeting.

The demand for water for domestic use will continue to increase. In portions of western Montana, water use by people for their homes, lawns, and gardens may be the predominant new use. Ground water permit exemptions do not create a domestic use priority. They are, however, providing an incentive resulting in development of individual wells rather than community public water supply systems. Large scale increases in individual wells are likely to further complicate water allocation under the "first-in-time, first-in-use" system.

Federal Constraints

The 1952 McCarran Amendment subjected federal water rights to state general water right adjudications and administration.[48] However, water use in Montana is subject not only to state water law, but also to federal statutes, regulations and licenses. Several Montana rivers host dams and reservoirs constructed by the federal government as well as private parties such as investor-owned utilities. The operation of dams and reservoirs and the river flows that they support are affected by laws such as the Endangered Species Act (ESA), the Clean Water Act, and Flood Control Acts, by licenses issued by the Federal Energy Regulatory Commissions, by federal treaties, and by contracts among utilities.[49] These constraints are outside of the state water right framework and, in theory, do not conflict with water rights. However, by requiring reservoir drawdowns, spill at dams, and flow augmentation measures, these requirements affect the physical and/or legal availability of water. Because of the Supremacy Clause of the United States Constitution, conflicts between implementation of federal statutes and state law may be resolved in favor of federal obligations.

The operation of Hungry Horse and Libby dams in the Clark Fork River and Kootenai River basins are illustrative. Both are subject to requirements resulting from the listing of anadromous fish stocks downstream in the Columbia Basin. As a result of litigation, a United States District Judge has rejected the 2000 and 2004 biological opinions for the Federal Columbia River Power System written by the National Marine Fisheries Service (NMFS) to satisfy the legal requirements of the ESA. In the absence of an acceptable biological opinion, this judge has adopted specific requirements for the operation of the Columbia River dams, including Hungry Horse and Libby, addressing reservoir drawdowns, spill, and flow augmentation. The judge has recently written that should NMFS fail again to produce an acceptable biological opinion, he may issue a "...permanent injunction directing the Federal Defendants to implement additional spill and flow augmentation measures, to obtain additional water from the upper Snake and Columbia River, or to implement reservoir drawdowns to enhance in-river flows."[50] Because the Libby and Hungry Horse reservoirs are

[48]66 Stat. 560, 43 U.S.C. § 666.

[49]For specific examples of such constraints applicable to the Clark Fork River Basin, see *Clark Fork Basin Watershed Management Plan*, Chapter 5, Legal and Regulatory Constraints to Water Management, pages 68-72, September 2004.

[50]James A. Redden, United States District Judge, District of Oregon, memorandum to Counsel of Record in Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv., CV 01-640 RE, and American Rivers v. NOAA Fisheries, CV 04-00061 RE, December 7, 2007.

two of the four largest storage reservoirs in the Columbia River basin, these spill, flow, and drawdown measures may limit the water available from them for use by Montana water users. The Montana Department of Fish, Wildlife and Parks has proposed a draw down limit to benefit bull trout in Hungry Horse reservoir that has been included in the Columbia River Basin Fish and Wildlife Program adopted by the Northwest Power and Conservation Council and in the recently released NOAA Fisheries Federal Columbia River Power System Biological Opinion.[51] ESA and other constraints also affect the operation of federal resources east of the Continental Divide in the Missouri River basin.

appropriation states, Montana does not provide a general priority for domestic water uses. The ground water permit exemption and DNRC's interpretation of combined appropriations of ground water has increased reliance on individual wells for domestic water supply. The burden measured in time and dollars on individual water right holders to define, enforce, protect, and/or change water rights threatens the viability of the rights themselves. A right that cannot be defined, enforced, protected, and/or changed, has little or no value. In addition, federal laws, regulations and licenses increasingly constrain water management and use outside the framework of state water law.

Summary

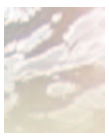
Montana water law is governed by the doctrine of prior appropriation, first-in-time, first-in-use. As this paper has shown, the lack of institutional capabilities and resources and growing demands for a limited resource are eroding the effect of this doctrine. The era in which new and expanded water uses are provided via new surface water rights is essentially over. The growing development of ground water and recent court rulings and legislation increases both the importance and complexity of managing ground and surface water interactions. Unlike other prior

[51] See 2003 Mainstem Amendments to the Columbia River Basin Fish and Wildlife Program, Columbia River Basin Fish and Wildlife Program, Portland, Oregon, 2003, available at http://www.nwcouncil.org/library/2003/2003-11.pdf ; and the NOAA Fisheries Federal Columbia River Power System Biological Opinion, May 5, 2008 page 6, available through http://www.nwr.noaa.gov/Salmon-Hydropower/Columbia-Snake-Basin/final-BOs.cfm.

Clark Fork River Basin Task Force

Name	Organization	Area/Interest Represented	Contact Information
Marc Spratt	Flathead Conservation District	Flathead Basin above Flathead Lake	752-2025
Nate Hall	Avista	Hydropower Utilities	847-1281
Holly Franz	PPL Montana	Hydropower Utilities	442-0005
Gail Patton	Sanders County Commissioner	Basin Local Governments	827-6942
Arvid Hiller	Mountain Water Company	Municipal water companies and Clark Fork River watershed between confluence of the Blackfoot River and Clark Fork River and confluence of Clark Fork River and Flathead River	721-5570
Caryn Miske	Flathead Basin Commission	Flathead Lake	626-5789
Ted Williams	Flathead Lakers	Flathead Lake	251-4960
Steve Hughes	Joint Board of Control	Flathead River watershed below Flathead Lake to confluence with Clark Fork River	883-3475
Harvey Hackett	Bitter Root Water Forum	Bitterroot River watershed	777-3214
Fred Lurie	Blackfoot Challenge	Blackfoot River watershed	859-3461
Jim Dinsmore	Granite Conservation District & Upper Clark Fork River Basin Steering Committee	Upper Clark Fork River watershed	288-3393
Brianna Randall	Clark Fork Coalition	Conservation/environmental organizations	542-0539
George Culpepper, Jr.	Northwest Montana Association of Realtors®	Real estate	752-4197
Verdell Jackson, *Ex Officio*	State Senator	Senate District 5	756-8344

The Clark Fork Task Force is the only entity with the statutory responsibility to plan for the management of the water in the Clark Fork River basin, which encompasses almost all of Montana west of the Continental Divide, a 22,000 square mile area with a population in excess of 320,000. The Task Force is working to secure a source of water for future basin consumptive uses and to increase the security of existing water rights.



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